TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF SCIENCE IN FOOD TECHNOLOGY AND QUALITY ASSURANCE (BSFQ13S &BSFQ14S2)

YEAR 3 SEMESTER 2

AFS 4311 : NON ALCOHOLIC BEVERAGES

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: Pick Date Select Month Pick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. Attempt Choose instruction.

QUESTION ONE

a) Discuss the development trends in soft drink manufacture **(6 marks)**

b) Discuss three reasons for water treatment **(6 marks)**

c) Distinguish between the following in tea processing;

i. Oolong tea and black tea **(2 marks)**

ii. Discuss the objectives of firing tea **(4 marks)**

d) i. Draw the structure of a coffee bean and clearly label all the parts **(3 marks)**

ii. Outline the objectives of coffee roasting **(3 marks)**

e) i. Explain the uses of chocolate in the food industry **(3 marks)**

ii. Describe the following chocolate products;

Baking chocolate **(1 mark)**

Sweet chocolate **(1 mark)**

Milk chocolate **(1 mark)**

QUESTION TWO

i) Carbon dioxide is a uniquely suitable gas for soft drinks because of its characteristics. Discuss **(4 marks)**

ii) Explain the role of acids in soft drink manufacture **(4 marks)**

iii) Describe **TWO** ways of clarifying juices **(8 marks)**

iv) Discuss the quality control of soft drinks **(4 marks)**

QUESTION THREE

i) Distinguish between natural mineral water and spring water **(4 marks)**

ii) Discuss the procedure of water treatment **(10 marks)**

iii) Explain **FOUR** objectives of water treatment **(6 marks)**

QUESTION FOUR

i) Discuss the challenges facing tea farmers in Kenya, suggesting possible solutions to the same **(20 marks)**

QUESTION FIVE

i) Discuss the fermentation process of coffee **(10 marks)**

ii) Using a graphical representation, explain the changes that occur to the quality attributes of coffee during roasting **(10 marks)**